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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/806,584	03/23/2004	Laurence N. Bascom	HT3985USNA	2245

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E I DU PONT DE NEMOURS AND COMPANY
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4417 LANCASTER PIKE
WILMINGTON, DE 19805

EXAMINER

RUDDOCK, ULA CORINNA

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 02/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/806,584

Applicant(s)

BASCOM ET AL.

Examiner

Ula C. Ruddock

Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 November 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>11/23/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The Examiner has carefully considered Applicant's amendments and accompanying remarks filed November 23, 2005.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Double Patenting

3. Claims 1-12 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-20 of copending Application No. 10/996897. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims are obvious variants over one another.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Rejection is maintained.

4. Claims 1-12 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-8, 10, and 11 of copending Application No.11/017045. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims are obvious variants over one another.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Rejection is maintained.

5. Claims 1-12 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-20 of copending Application No. 11/023153. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims are obvious variants over one another.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Applicant argues that 11/023153 requires ridges and grooves. It is the Examiner's position that this modification is an obvious variant over the claims of the present invention. Rejection is maintained.

Claim Rejections - 35 USC § 103

6. Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Erb, Jr. et al. (US 2002/0182967) in view of Matsuda et al. (US 5,316,834) and Assink et al. (US 2004/0028958). Erb, Jr. et al. disclose a fire blocking material comprising nonwoven fabric including para-aramid fibers (abstract) and a polyester woven scrim [0017]. It should be noted that the Examiner is equating the crimped organic fibers on the first side disclosed in the present invention to Erb's nonwoven p-aramid fibers. The nonwoven fabric layer is generally supported by at least one scrim [0027]. In some embodiments, the fabric may incorporate multiple layers of scrim material and multiple nonwoven fabric layers [0027]. A combustible seat cushion bottom is composed of a foam cushion and a thin woven fabric cover. The fiber blocking fabric covers the foam cushion seat bottom [0023]. Erb, Jr. fails to disclose that the p-aramid fibers are crimped and that the p-aramid fibers are held in a compressed state by a thermoplastic binder.

Matsuda et al. (US 5,316,834) disclose a flame-resistant, fiber-reinforced thermoplastic sheet (col 4, ln 43-46). A preferred organic heat-resistant fiber is para-aramid fiber (col 5, ln 39-41). The heat-resistant fiber is crimped to a web from to impart the fiber structure material with a high fiber-entangling strength (col 5, ln 64-67).

Assink et al. (US 2004/0028958) disclose a fire-resistant batt and panel that comprises fiber and binder material (abstract). The fiber component can include aramid fibers [0020]. The binder component acts as an adhesive and binder to bond the fibers into a relatively rigid configuration [0022]. A preferred binder can be polyester in a fibrous form or a particle (i.e. powder) form [0022].

It would have been obvious to have used Matsuda's crimping process on the fibers of Erb, Jr. et al. and Assink et al., motivated by the desire to create a fabric that is lightweight and has excellent mechanical properties. It also would have been obvious to have used Assink's polyester fiber binder or polyester powder binder on the fabric of Erb, Jr. et al. and Matsuda et al., motivated by the desire to create a fabric having greater strength and load-bearing properties.

Regarding claims 1-3, although Erb, Jr. et al., Matsuda et al., and Assink et al. do not specifically teach that when the fabric is exposed to heat or flame it increases its thickness by at least three times, or five times, or ten times, it is reasonable to presume that this property is inherent to the invention of Erb, Jr. et al., Matsuda et al., and Assink et al.. Support for said presumption is found in the use of like materials (i.e. a scrim, crimped organic fibers, thermoplastic binder). The burden is upon Applicant to prove otherwise. In re Fitzgerald, 205 USPQ 594. In addition, the presently claimed property of the fabric

increasing its thickness by at least three times, or five times, or ten times when exposed to heat or flame, would obviously have been present once the product of Erb, Jr. et al., Matsuda et al., and Assink et al. is provided. Note In re Best, 195 USPQ at 433, footnote 4 (CCPA 1977).

Rejection is maintained.

7. Claims 1-4 and 6-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Corner (US 2003/0232560) in view of Matsuda et al. (US 5,316,834) and Assink et al. (US 2004/0028958). Corner (US 2003/0232560) discloses flame resistant fabrics having increased strength. The flame resistant fabric includes a plurality of flame resistant body yarns that form a body of the fabric and a plurality of relatively tough yarns provided in discrete positions within the fabric body (abstract). The tough yarns arranged in a grid (i.e. scrim) pattern in which several body yarns are placed between each consecutive tough yarn in both the warp and weft direction [0025]. The body yarns can be para-aramid flame resistant fibers [0023] and the tough yarns comprise flame resistant polyester [0031]. It should be noted that the Examiner is equating the crimped organic fibers on the first side disclosed in the present invention to the p-aramid body yarns of Corner. Corner fails to disclose that the p-aramid fibers are crimped and that the p-aramid fibers are held in a compressed state by a thermoplastic binder.

Matsuda et al. (US 5,316,834) disclose a flame-resistant, fiber-reinforced thermoplastic sheet (col 4, ln 43-46). A preferred organic heat-resistant fiber is para-aramid fiber (col 5, ln 39-41). The heat-resistant fiber is crimped to a web from to impart the fiber structure material with a high fiber-entangling strength (col 5, ln 64-67).

Assink et al. (US 2004/0028958) disclose a fire-resistant batt and panel that comprises fiber and binder material (abstract). The fiber component can include aramid fibers [0020]. The binder component acts as an adhesive and binder to bond the fibers into a relatively rigid configuration [0022]. A preferred binder can be polyester in a fibrous form or a particle (i.e. powder) form [0022].

It would have been obvious to have used Matsuda's crimping process on the fibers of Corner and Assink et al., motivated by the desire to create a fabric that is lightweight and has excellent mechanical properties. It also would have been obvious to have used Assink's polyester fiber binder or polyester powder binder on the fabric of Corner and Matsuda et al., motivated by the desire to create a fabric having greater strength and load-bearing properties.

Regarding claims 1-3, although Corner, Matsuda et al., and Assink et al. do not specifically teach that when the fabric is exposed to heat or flame it increases its thickness by at least three times, or five times, or ten times, it is reasonable to presume that this property is inherent to the invention of Corner, Matsuda et al., and Assink et al.. Support for said presumption is found in the use of like materials (i.e. a scrim, crimped organic fibers, thermoplastic binder). The burden is upon Applicant to prove otherwise. In re Fitzgerald, 205 USPQ 594. In addition, the presently claimed property of the fabric increasing its thickness by at least three times, or five times, or ten times when exposed to heat or flame, would obviously have been present once the product of Corner, Matsuda et al., and Assink et al. is provided. Note In re Best, 195 USPQ at 433, footnote 4 (CCPA 1977).

Rejection is maintained.

Response to Arguments

8. Applicant's arguments filed November 23, 2005, have been fully considered but they are not persuasive for the reasons set forth. Applicant argues that the references would not disclose the claimed invention, and more specifically, would not result in a fabric that upon exposure to heat or flame will increase its thickness by three, five, or ten times. This argument is not persuasive because the combination of Erb, Jr. et al., Matsuda et al., and Assink et al. and Corner, Matsuda et al., and Assink et al. comprise the same materials in the same structure as Applicant. Therefore, these references, when combined, would result in a fabric that will increase its thickness by three, five, or ten times when exposed to heat or flame. The references, when combined, disclose a thermoplastic mesh, heat-resistant crimped fibers, and a thermoplastic binder, which are the same materials claimed by Applicant. Therefore, their properties would be expected to be the same. Applicant also argues that Matsuda et al. is nonanalogous to the Erb, Jr. et al. and Corner references, because Matsuda et al. is a sheet. This argument is not persuasive because, although Matsuda et al. describes a sheet, the sheet material of Matsuda et al. refers to a first layer comprising a fabric and resin (col 5, ln 12-14) and a second layer comprising a heat-resistant fiber and a thermoplastic resin (col 5, ln 30-32). Therefore, the references are all drawn to fabrics and fibers and are properly combinable. The rejections are maintained.

Conclusion

9. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ula C. Ruddock whose telephone number is 571-272-1481. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel H. Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

UCR

UCR

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